



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of :  
Shigeo YOSHIDA et al. : Attorney Docket No. 2006\_0400A  
Serial No. 10/573,774 :  
Filed March 28, 2006 :  
METHOD AND APPARATUS FOR :  
POWER LINE COMMUNICATION (AS :  
AMENDED) :

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**PETITION TO MAKE SPECIAL**  
**Request for Accelerated Examination**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

THE COMMISSIONER IS AUTHORIZED  
TO CHARGE ANY DEFICIENCY IN THE  
FEES FOR THIS PAPER TO DEPOSIT  
ACCOUNT NO. 23-0975

Sir:

Applicants hereby petition the Patent and Trademark Office to make the present application special on the basis of a preexamination search.

This Petition to Make Special is accompanied by the appropriate fee set forth in 37 C.F.R. 1.17(h).

Applicants hereby offer to make an oral election without traverse should the PTO hold that the claims of the application are not directed to a single invention.

A copy of an International Search Report for corresponding International Application No. PCT/JP2005/015499 is enclosed herewith. The claims in the corresponding International Application are of similar scope to the claims in the present application. Accordingly, the International Search Report satisfies the requirement for a pre-examination search.

Of the references cited in the International Search Report, the following reference is the reference deemed most closely related to the subject matter encompassed by the claims:

Kopp, US 2004/0070912 A1

05/18/2006 GFREY1 00000153 10573774

01 FC:1464

130.00 OP

This reference and the International Search Report in which the reference was cited were made of-record in the present application in an Information Disclosure Statement filed March 28, 2006.

**DETAILED DISCUSSION OF THE SUBMITTED REFERENCE AND  
DISCUSSIONS POINTING OUT HOW THE CLAIMED SUBJECT MATTER  
DISTINGUISHES OVER THE SUBMITTED REFERENCE**

In view of the following remarks, it is requested that this Petition to Make Special be granted and that the present application be examined under the accelerated examination procedure.

Please note that a Preliminary Amendment is filed concurrently herewith amending the claims of the application.

Independent claims 1 and 9 of the present application recite apparatuses which include a communication control portion operable to set a communication period to  $Lxm/n$ , where  $L$  is a variation cycle of characteristics of a transmission line,  $n$  is an integer that is 2 or larger, and  $m$  is an integer that is greater than or equal to  $n$  and whose greatest common measure with  $n$  is 1, and a transmission line estimation portion operable to estimate the characteristics of the transmission line within a time  $L/n$  after a certain offset time has passed since the communication period started. Independent method claim 9 recites a method including setting a communication period to  $Lxm/n$ , where  $L$  is a variation cycle of characteristics of a transmission line,  $n$  is an integer that is 2 or larger, and  $m$  is an integer that is greater than or equal to  $n$  and whose greatest common measure with  $n$  is 1, and estimating the characteristics of a transmission line within a time  $L/n$  after a certain offset time has passed since the communication period started.

As is clear from the features discussed above, in the present invention, estimation of the characteristics of the transmission line is performed while the communication is occurring because  $L/n$  is less than  $Lxm/n$ . On the contrary, Kopp discloses an estimation method that is performed off-line, i.e., not while communication is occurring. Thus, Kopp does not disclose that estimation of the characteristics of the transmission line is performed within a time  $L/n$  after a certain offset time has passed since the communication period started, wherein the communication period is set based on

the expression Lxn/n, as recited in each of independent claims 1, 9, and 10 of the present application. Accordingly, claims 1-10 of the present application are not anticipated or obvious in view of Kopp.

In view of the above remarks, it is requested that this Petition to Make Special be granted and that the present application be examined under the accelerated examination procedure.

The Special Program Examiner is invited to contact the undersigned by telephone if it is felt that there are any issues remaining which must be resolve before the granting of the Petition to Make Special.

Respectfully submitted,

Shigeo YOSHIDA et al.

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May 15, 2006

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Serial No. 10/573,774

Filed March 28, 2006

METHOD AND APPARATUS FOR POWER  
LINE COMMUNICATION (AS AMENDED)



Attorney Docket No. 2006\_0400A

**PATENT OFFICE FEE TRANSMITTAL FORM**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

THE COMMISSIONER IS AUTHORIZED  
TO CHARGE ANY DEFICIENCY IN THE  
FEES FOR THIS PAPER TO DEPOSIT  
ACCOUNT NO. 23-0975

Sir:

Attached hereto is a check in the amount of \$130.00 to cover Patent Office fees relating to filing the following attached papers:

Petition to Make Special ..... \$130.00

A duplicate copy of this paper is being submitted for use in the Accounting Division, Office of Finance.

*The Commissioner is authorized to charge any deficiency or to credit any overpayment associated with this communication to Deposit Account No. 23-0975, with the EXCEPTION of deficiencies in fees for multiple dependent claims in new applications.*

Respectfully submitted,

Shigeo YOSHIDA et al.

By

  
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